PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Hunder the Par TRADE Reduction Act of 1995, no persons are required to res

Substitute for form 1449/PTO

FEB 2 5 2011

Sheet 1

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

=		nplete if Known
	Application Number	10/543045
	Filing Date	7/21/2005
	First Named Inventor	COOPER, JEFFREY A
	Art Unit	2483
	Examiner Name	HOLDER, ANNER N.
	Attorney Docket Number	PU030321

			U. S. PATENT	DOCUMENTS	
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ^{2 (f known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		^{US-} 4870497	09/26/1989	CHAMZAS ET AL.	
		US- 5477263	12/19/1995	O'CALLAGHAN ET AL.	
		us- 5446759	08/29/1995	CAMPANA, JR.	
		^{US-} 5822324	10/13/1998	KOSTRESTI ET AL.	
		^{US-} 5592471	01/07/1997	BRISKMAN	
		^{US-} 5703877	12/30/1997	NUBER ET AL.	
		^{US-} 5835483	11/10/1998	BISSON	
		^{US-} 6038257	03/14/2000	BRUSEWITZ ET AL.	
		^{US-} 6144400	11/07/2000	EBISAWA	
		^{US-} 6148005	11/14/2000	PAUL ET AL.	
		^{US-} 6195024	02/27/2001	FALLON	
		^{US-} 6211926	04/03/2001	WON	
		^{US-} 6701528	03/02/2004	ARSENAULT ET AL.	
		^{US-} 6414725	07/02/2002	CLARIN ET AL.	
		us- 6418549	07/09/2002	RAMCHANDRAN ET AL.	
		us- 6442622	08/27/2002	YAMAMOTO ET AL.	
		^{US-} 6480541	11/12/2002	GIROD ET AL.	
···		^{US-} 6646578	11/11/2003	AU	
		^{US-} 7155735	12/26/2006	NGO ET AL.	

		FORE	IGN PATENT DOCU	MENTS		
Examiner Initials*	Cite No.	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
		Country Code ^{3 -} Number ^{4 -} Kind Code ⁵ (if known)	MM-DD-YYYY		Or Relevant Figures Appear	Τ°
	-	CA1065409	10/30/1979	BAKER		
		WO00/16544	03/23/2000	ACTV, INC.		
****		JP2001285736	10/12/2001	CANON KK	Machine Trans.	L
		JP1045342	05/29/1998	SONY CORP.		V
		WO00/14967	0316/2000	KONINKLIJKE PHI		
		WO/74086	10/04/2001	KONINKLIJKE PHI		

Examiner	Date		
Signature	Cons	sidered	
	· ·	i	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language ranslation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the TOSPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

Sheet 2

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Col	mplete if Known
Application Number	10/543045
Filing Date	7/21/2005
First Named Inventor	COOPER, JEFFREY A
Art Unit	2483
Examiner Name	HOLDER, ANNER N.
Attorney Docket Number	PU030321

			U. S. PATENT	DOCUMENTS	
Examiner Initials*	Cite No.1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant
	<u></u>	Number-Kind Code ^{2 (if known)}			Figures Appear
		^{US-} 6920422	07/12/2005	KROON ET AL.	
		^{US-} 6701528	03/02/2004	ARSENAULT ET AL.	
		^{US-} 6771657	08/03/2004	ELSTERMANN	
		^{US-} 6304609	10/16/2001	STEPHENS ET AL.	
		^{US-} 7403660	07/22/2008	HANNUKSELA	
		^{US-} 7003794	02/21/2006	AYRE	
-		^{US-} 2002/0040481	04/04/2002	OKADA ET AL.	
		^{US-} 2002/0047902	04/25/2002	THOMAS ET AL.	
		^{US-} 2002/0002708	01/03/2002	AYRE	
		^{US-} 2002/0101581	08/01/2002	MURAKAWA ET AL.	
		^{US-} 2002/0191712	12/19/2002	GADDAM ET AL.	
		^{US-} 2002/0129374	09/12/2002	FREEMAN ET AL.	
		^{US-} 2002/0191116	12/19/2002	KESSLER ET AL.	
		us- 2004/0028228	02/12/2004	HAMADA ET AL.	
	<u> </u>	us- 2004/0101057	05/27/2004	SHIRAISHI ET AL.	
		^{US-} 2004/0162078	08/19/2004	RAMASWAMY ET AL.	
		^{US-} 2006/0050780	03/09/2006	COOPER ET AL.	
	1	^{US-} 2006/0050781	03/09/2006	COOPER ET AL.	
	1	^{US-} 2006/0056505	03/16/2006	RAMASWAMY ET AL.	

		FORE	IGN PATENT DOCL	JMENTS		
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ "Number ⁴ "Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T⁵
		EP1306992	05/02/2003	HITACHI, LTD		
-		JP2000354023	12/19/2000	MITSUBISHI ELEC		V
		JP2002344838	11/29/2002	FUNAI ELEC.	Machine Trans.	<u> </u>

Examiner	Date	
Signature	Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450.

TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Sheet 3

PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Complete if Known Substitute for form 1449/PTO **Application Number** 10/543045 Filing Date 7/21/2005 INFORMATION DISCLOSURE First Named Inventor COOPER, JEFFREY A STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Art Unit 2483 **Examiner Name** HOLDER, ANNER N. Attorney Docket Number PU030321

			U. S. PATEN	DOCUMENTS	
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ^{2 (f known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		^{US-} 2006/0117360	, 06/01/2006	COOPER ET AL.	
	· · · · · ·	^{US-} 6711657	03/23/2004	SEXTON ET AL.	
		US-			
	· · · · · ·	US-			
	-	us-			
		US-			
		US-			
		US-			
		US-			
·		US-			
		US-			
	 	US-			
	 	US-			
	 	US-			
		US-			

	FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages				
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	MM-DD-YYYY		Or Relevant Figures Appear	T ⁶			
<u>-</u> .						<u>_</u>			
_ 						┢			
						╫━			
	-		-			1			

Examiner	Date	
Signature	Considered	ł

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Code USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ² See Kinds Codes of Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Skind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

PTO/SB/08b(08-03)

Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO Complete if Known Application Number 10/543045 INFORMATION DISCLOSURE 07/21/2005 Filing Date STATEMENT BY APPLICANT First Named Inventor COOPER, JEFFREY ALLEN Art Unit (Use as many sheets as necessary) ANNER HOLDER Examiner Name 4 Attorney Docket Number PU030321 Sheet of

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		R. STEELE ET AL. "TIME DIVERSITY WITH ADAPTIVE ERROR DETECTION TO COMBAT RAYLEIGH FADING IN DIGITAL MOBILE RADIO" IEEE TRANSACTIONS ON COMMUNICATIONS, IEEE INC., NEW YORK US, vol COM-31, NO. 3 March 1983, pages 378-387.	
		·	
			!
-			

Examiner	Date	
Signature	Consi	dered

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.